Radio Replacement Kit

for Jeep Wrangler JL and Jeep Gladiator JT Vehicles

### Introduction and Features

The SRX-JW18128 is a complete radio replacement kit with integrated climate control retention for select Jeep Wrangler JL and Jeep Gladiator JT vehicles. All modules and cables are included to retain important features of the factory system, including: steering wheel-mounted radio controls, factory reverse camera, USB ports, and AM/FM reception.

Data integration with the vehicle and the Stinger ix212 radio allows for the retention and addition of the following features: vehicle performance gauges and information, climate controls, vehicle settings, factory amplifier control, and forced camera activation. Simplified installation and setup menus allow direct programming of camera triggers, steering wheel controls, and other settings of the radio and CH4A-JW18 interface. See Important Notes (next section) for additional information.

Plug & Play wiring harnesses and cables allow for quick and easy installation without the need to cut or splice any wiring.

## Important Notes

We recommend reading this manual thoroughly to familiarize yourself with the entire process prior to beginning the installation.

#### 1. Does Not Retain:

#### **Cluster Display Features**

- Compass (when equipped with 7" or 8.4" screen)
- Clock
- Phone pop-ups
- Navigation pop-ups

#### **Factory Amplifier Features**

Speed Controlled Volume

#### **Uconnect Features**

- Uconnect Access Remote Start / Lock / Unlock
- SOS / Assist
- Vehicle Location Service
- WiFi-Hotspot

#### SiriusXM Guardian Services

SiriusXM Radio

- 2. When connected properly, the USB port inside the center console will function for **Apple Carplay/Android Auto**, and all other USB ports will be used for USB thumb drives and charging only.
- 3. Ensure that the CH4A-JW18, PL1, and RPA-HD1 modules have been updated to the latest version of firmware before installing into the vehicle. Refer to the Updating Firmware section at the end of the manual for firmware update instructions
- 4. When connecting an HDMI streaming device to the RPA-HD1, use an HDMI extension cable to position it away from the module to ensure proper functionality. We recommend placing the HDMI device in the glove box. Failure to follow the directions may result in module malfunction.



## Tools Needed; Included Components

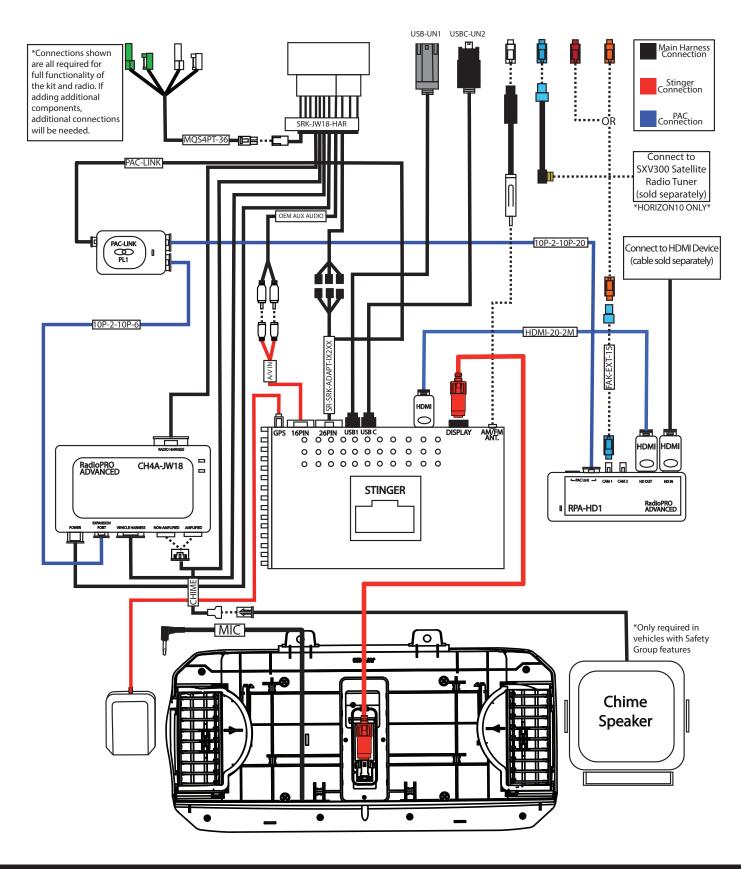
Tools needed for installation: 7mm socket, 10mm socket, ratchet extension, T20 torx screwdriver, T25 torx screwdriver, pick tool or small flathead screwdriver, plastic panel removal tool (example - PAC part number TL-PRY2).

- 1. ix212 Display & Mounting Panel (JW18128 ASM)
- 2. iX212 Radio Chassis
- 3. JW18128 Main Frame Bracket 1
- 4. Radio Module Mounting Brackets (L&R)
- 5. RPA-HD1 Mounting Bracket (SE-JW18H\_MODULE BRACKET)
- 6. Chime Speaker (P-RPA-SPK)
- 7. 7' USB Port Retention Adapter (USBC-UN2)
- 8. Radio Replacement Interface Module (CH4A-JW18)
- 9. HD Camera Retention Module (RPA-HD1)
- 10. PAC-LINK Interface Module (PL1)
- 11. 15" Factory Camera Extension Harness (FAK-EXT-15)
- 12. HDMI-20-2M\_Rev1
- 13. CAN-Bus Connection Harness (MQS4PT-36)
- 14. Main Wiring Harness (SPK-JW18-HAR)
- 15. Felt AC Vent Protectors (L&R)
- 16. Radio Harness Adapter (SR-SRK-ADAPT-IX2XX)
- 17. Satellite Antenna Adapter (SAT-01)
- 18. 20" Data Harness (10P-2-10P-20)
- 19. AM / FM Antenna Adapter (BAA22)
- 20. 8" USB Hub Retention Adapter (USB-UN1)
- 21. 6" Data Harness (10P-2-10P-6)
- 22. GPS Antenna
- 23. 16 Pin Audio Video Harness
- 24. 14 Pin SWC/CAN/UART Cable
- 25. 12 Pin Audio Pre-Amp Line Out Harness
- 26. Glass Cloth (Not Shown)
- 27. GPS Antenna Mounting Plate (Not Shown)



Included 20" zip ties (1x), 4" zip ties (10x), M5 x 10 Screws (4x), M4 x 10 Screws (4x), 10 x 3/8 Screw (8x), M3 x 12 (1x) **NOT SHOWN**.

# Complete Wiring Diagram Overview





# **SRX-JW18128**

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This installation manual will cover the necessary order of procedures to complete the installation efficiently and to avoid redoing any steps along the way. The order will be as follows; Disassembly, Radio Unit Mounting Preparation, Radio Unit Harness Connections and Preparation, In-Vehicle Harness Connections and Preparation, Radio Unit Installation, and Reassembly.

### Section 1: Disassembly

#### Part One: Radio Removal



Step 1

Pull out at the top of the knee bolster to release the retaining clips, then work your hands down the edges of the knee bolster to release the remaining clips and remove the panel.



Step 2

Grasp the climate control panel at the exposed left edge and pull out to unclip the left side, then work your fingers around the remaining edges of the panel to fully unclip it.



Step 3

Disconnect the push-to-start button and climate control connectors from the back of the climate control panel and remove.



Step 4

Remove the two *7mm* screws securing the radio bezel to the dash, then pull outward on the radio bezel to unclip it and remove.



Step 5

Remove the four **7mm** screws securing the radio in place, then lift the radio out of the radio cavity.



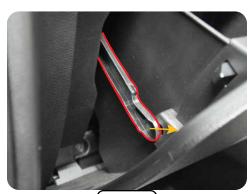
Step 6

Disconnect the antenna and USB connectors from the back of the radio, then disconnect the 52-pin dock-and-lock connector and remove the radio.



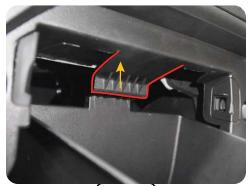
## Section 1: Disassembly (Continued)

### Part Two: Glove Box Removal



Step 1

Open the glove box and unclip the soft-open sliding arm clasp from the left side of the glove box.



Step 2

Push up on the glove box stop tab to allow the glove box to fall forward out of the glove box opening, then unhinge the bottom of the glove box and remove.

### Part Three: Center Console Panel Removal



Step 1

Open the center console storage lid, then remove the two **T20** torx screws securing the rear console panel in place.



Step 2

While pulling the panel towards the rear of the vehicle, use a plastic panel removal tool to release the clips securing the panel in place and remove.

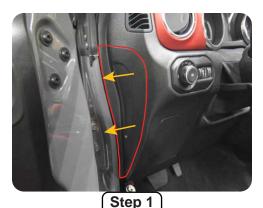


Step 3

Disconnect the inner center console USB port connector.

# Section 1: Disassembly (Continued)

### Part Four: Door Sill and Trim Removal



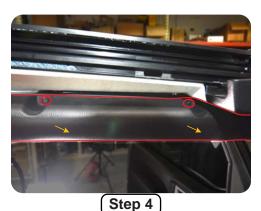
Use a plastic panel removal tool to remove the panel on the driver side of the dash.



Use a plastic panel removal tool to open the driver side handle bolt covers, then remove the two **10mm** bolts.



Remove the two **T25** screws on the underside of the driver side upper door seal trim.



Remove the two T25 screws on the inner-most side of the driver side upper door seal trim; then, while pulling towards the middle of the vehicle, use a plastic panel removal tool to remove it.

# Section 2: Radio Unit Mounting Preparation

#### Part One: Assembling the Radio Module Mounting Brackets



Step 1

Locate the Radio module side brackets labeled L & R.



Align the side brackets to the radio module. Use alignment pins on side brackets to find proper screw mounting locations. Install Four M5x10 phillips screws. Two screws left and right sides.



Step 3

Secure the side brackets to the main bracket using the four #10x3/8 Phillips course threaded screws.

### Part Two: Mounting the Interface Modules and Stinger Radio Module



Using the provided Module Bracket, lay mounting bracket on bench with side mounting feet facing up. Configure the (CH4A-JW18) to the bracket in left configuration shown above. Zip-Tie to mouting holes on module bracket that align closest to the mounting tabs on RadioPRO module.



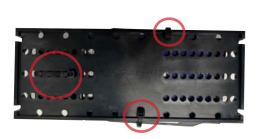
Step 2

To the right of the (CH4A-JW18) module, zip-tie the (PAC-LINK) module using the zip-tie channel located on the back side of the (PAC-LINK) as shown above.



# Section 2: Radio Unit Mounting Preparation (Continued)

Part Two: Mounting the Interface Modules and Stinger Radio Module (Continued)



### Step 3

Ensure **PAC-LINK USB** faces the same direction as **(CH4A-JW18)**dip switches.
Tighten zip-ties so the ratchet head of the zip-ties are located on the oposite side of PAC modules.



Step 4

Align the module bracket to the radio main bracket mounting holes at the bottom of the radio. Secure the module bracket using the the four #10x3/8 Phillips course threaded screws. Two screws on left and right sides.

# Section 3: Radio Unit Harness Connections and Preparation

Part One: Main Harness Connections (RPK-JW18-HAR)

Note: It does not matter what the DIP switches on the CH4A-JW18 module are set to.



Locate the *Main Wiring Harness* (SRK-JW18-HAR) and the *Radio Harness Adapter* (SR-SRK-ADAPT-IX2XX). Connect the Power, Speaker and Input/Output harnesses from the main harness to the adapter harness.



Step 2

Connect the *Radio Harness Adapter* (*SR-SRK-ADAPT-IX2XX*), labeled "26 Pin Radio" to the Stinger Radio Module connector labeled "Power."



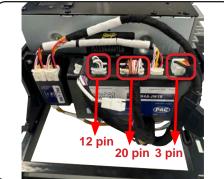
Step 3

From the (SPK-JW18-HAR) harness, Connect the 24 pin connector to the (CH4A-JW18) module. Connect 3 pin yellow wired connector to (PAC-LINK) module.



# Section 3: Radio Unit Harness Connections and Preparation (Continued)

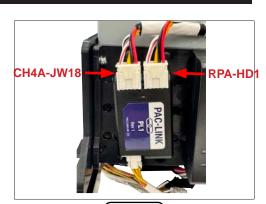
Part One: Main Harness Connections (RPK-JW18-HAR) Continued



Step 4

RadioPRO ADVANCED RADIO INSTALLATION

Step 5



Step 6

On the back side of (CH4A-JW18) Connect the 3 pin connector, 20 pin connector, and 12 pin connector to the (CH4A-JW18) module Connectors are located on (SPK-JW18-HAR) harness.

Ensure that the 12-pin connector is plugged into the correct audio output port (this depends on if the vehicle is equipped with a factory/ aftermarket amplifier or no amplifier.

Connect (10P-2-10P-6-HAR) to (CH4A-JW18) expansion port and opposite end to outer most (PAC-LINK) port.

Connect (10P-2-10P-20-HAR) to inner most most (PAC-LINK) port and rout opposite end



Step 7

Step 8

Locate the 16 Pin AV Harness (PSEH-2103) from the ix212 box. Connect this to the "AV IN" connector on the Stinger Radio Module.

Connect the white and red male RCAs labeled "OEM AUX AUDIO" from the Main Wiring Harness (SRK-JW18-HAR) into the white and red female RCAs labeled "AUX IN" on the 16-pin A/V Harness (PSEH-2103).



# Section 4: In-Vehicle Harness Connections and Preparation

Part One: CAN Connections Harness (MQS4PT-36)



Step 1A

OR

Step 1B



Step 2

Behind the glovebox, connect the male white connector from the **CAN-Bus Connection Harness** (MQS4PT-36) into the green CAN junction block and the male green connector from the MQS4PT-36 into the white CAN junction block.

If there are no open ports on the CAN junction blocks, unplug one factory male connector and insert it into the same colored female connector on the MQS4PT-36 harness, then insert the male connector on the MQS4PT-36 harness into the now empty port on the CAN junction block.

Run the 4-pin connector on the MQS4PT-36 harness behind the glove box and out the radio opening.

### Part Two: Chime Speaker



Step 1

Remove the knobs from the chime speaker and mount the chime speaker bracket to the metal brace underneath the steering column using the double sided tape, mounting bolts, and wing nuts. Then, reinstall the speaker to the mounting bracket. (Two holes must be drilled into the metal brace to secure the speaker mounting bracket to it.)

Note: Installation of the chime speaker is only required in vehicles with safety group features that provide alert sounds. This can collision include warnings and back up sensors. Refer to your vehicles window sticker or build sheet for compatibility.



Step 2

Route the chime speaker cable behind the dash panels to the radio opening.



## Section 4: In-Vehicle Harness Connections and Preparation (Continued)

Part Three: GPS Antenna (provided in Stinger radio box)



Step 1

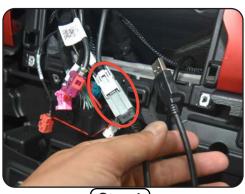
Clean the area next to the factory antenna on the center roll cage structure and stick the GPS mounting plate to it. Then, secure the GPS antenna to the mounting plate (it is magnetic). Route the cable behind the trim panels of the roll cage over to the driver side A-pillar.



Step 2

Route the GPS cable down the A-pillar past the plastic dash side panel, then route the cable behind the lower dash below the steering column and then up the center stack to the radio opening. (Secure with zip ties along the way.)

#### Part Four: USB Retention Adapters



Step 1

Connect the *USB-UN1* adapter to the factory USB connector that was unplugged from the factory radio.



Step 2

Connect the *USBC-UN2* adapter to the factory USB port in the back of the center console, then route the cable along the passenger side of the center console to the radio opening.



# Section 4: In-Vehicle Harness Connections and Preparation (Continued)

#### Part Five: Miscellaneous Connectors



Step 1

Step 2

Step 3

For vehicles equipped with factory back-up sensors, connect the 2-pin chime speaker connector to the main harness.

For vehicles without back-up sensors skip this step.

Connect the **AM/FM Antenna Adapter (BAA22)** to the antenna with the white connector that was disconnected from the factory radio.

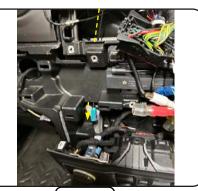
Connect the factory camera cable with an orange or red Fakra connector into the 15" Factory Camera Extension Harness (FAK-EXT-15).

#### Part Six: Harness and Cabling Connections



Step 1

Step 2



Step 3

Confirm all the in-vehicle harnesses are routed to the radio opening before installing the Stinger Radio Module.

Remove the screw holding the window switch panel.
Once removed pull forward on the back of the panel to release the clips. Note: There is no need to disconnect any of the switches.

Feed the Blue female Fakra connector (FAKRA-EXT-15), HDMI-20-2M, and 10P-2-10P-20 down the bottom left side of the radio opening.

Note: Pull all the slack out of the cable.

# Section 4: In-Vehicle Harness Connections and Preparation (Continued)

Part Seven: Installing the RPA-HD1



Step 1

Zip tie the RPA-HD1 module to the RPA-HD1 Mounting Bracket (SE-JW18H\_MODULE BRACKET). Note: Ensure the orientation matches the image above.



Step 2

Make the following connections to the RPA-HD1 module:
HDMI-20-2M to "HD Out"
FAK-EXT-15 to "Cam 1"
10P-2-10P-20 to "PAC Link".
Note: You can use a zip tie to hold the HDMI cable for best connection.



Step 3

Remove the screw from the area behind the window switch panel.



Step 4

Mount the connected *RPA-HD1* module. Use the screw you removed from step 3 to secure the assembly. Reinstall window switch panel.

For a complete wiring diagram overview, refer to page 2.



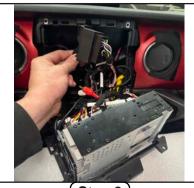
# Section 5: Radio and Display Installation

#### Part One: Radio Module Connections



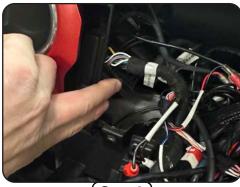
Step 1

Place top foam insert from the **HORIZON12** box on center console as shown above.



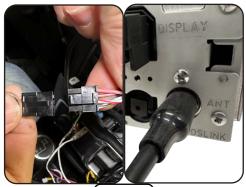
Step 2

Lay radio kit assembly face down on foam insert. Plug in the 52-pin connector from the (SPK-JW18-HAR) to the OEM 52-pin connector.



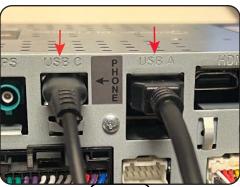
Step 3

Tuck the 52-pin connector into the left side of the dash radio opening. (Location shown above)



Step 4

Connect the CAN BUS connector from the *SRK-JW18-HAR* to the end of the *MQS4PT-36*. Connect the *AM/FM Antenna Adapter (BAA22)* to the "ANT" input on the Stinger Radio Module.



Step 5

Connect the USBs into the appropriate ports on the Stinger Radio Module. Ensure that the USB-UN1 is connected to the "USB A" input, and the center console USBC-UN2 is connected to the "USB C" input.



Step 6

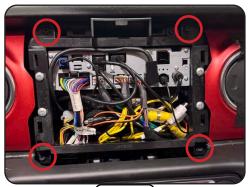
Connect the *GPS Antenna* to the "GPS" input. Connect the *HDMI Cable (HDMI-20-2M)* to the "HDMI" input. Route the cable out the front of the radio opening.

USBC-UN2 adapter cable from the rear of the center console. This input is for CarPlay/Android Auto



# Section 5: Radio and Display Installation (Continued)

### Part Two: Main Stinger Module Installation



Step 1

Install Radio Module in dash and tuck the access wire under the radio module. Reinstall factory phillips head radio mounting screws.



Step 2

Close air vent. Center the V of the felt cover to the finger depression of the air vent. The felt dash protection is driver and passenger side specific. Make sure larger end of the felt goes on top and smaller end goes on bottom.

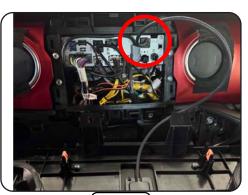


Step 3

When applying the felt, cover the silver trim of the vent and apply moving outward of the trim.

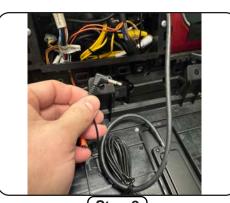
# Section 5: Radio and Display Installation (Continued)

#### Part Three: Display Panel Connections



Step 1

Place display face down on HORIZON12 box insert. Plug in LVDS cable to the LVDS port on the radio module.



Step 2

Plug in 3.5 from back of the display to the *External Mic* input on the *AV In* harness of the radio module.



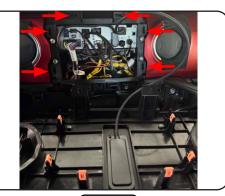
Step 3

Using 4" Zip-Ties, secure radio wiring. Wiring should be secured as close to the radio module as possible.



# Section 5: Radio and Display Installation (Continued)

#### Part Four: Display Panel Installations



Step 1

To mount the display, align the 6 clips in the center of the display to the clip insert locations of the Radio Mounting Kit.



Step 2

Slide the felt area, at the top of the display, between the upper mounting location of the Radio Mounting Kit and below the factory dash.



Step 3

Firmly press the top and bottom of the Display to engage display mounting clips. Once locked in, check around the sides and top of the Display for any gaps between the dash and the Display. (If gaps are located, remove the display and check alignment)



Step 4

Reinstall factory phillipshead radio mounting screws at the bottom of the display.



Step 5

Plug back in Push to Start button and climate control panel. Before reinstalling climate panel, test *HORIZON12* functionality.



Step 6

Install the *M3x12* phillips black tapping screw, in the center mounting hole, at the back of the display



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### **Troubleshooting**

- Reverse camera inoperable Verify that all reverse camera wiring connection points are proper by reviewing the RPA-HD1 connection steps.
- 2. Vehicle Info icon not showing on main menu After updating the Radio System Firmware, perform a master reset on the radio by tapping "Master Reset" in the "Installer Settings"; then, update the PAC Application APK firmware in that order. If the Vehicle Info icon still does not show, turn off the vehicle, open the driver door, and let it sleep for about 20 seconds, then restart the vehicle and check for the Vehicle Info icon again.

CH4A-JW18 Interface Module LED Diagnostics

LED Pattern	State	Action
LED 2 solid red	Vehicle RAP / ACC Output Is On	N/A
LED 2 flashing green	SWC Activity	N/A
LED 2 flashing red	Module Resetting / Initializing	N/A
LED 1 solid green	Module Powered and Operating	N/A
LED 1 flashing amber	USB Connected	N/A
Off	No Activity	Verify key is in ignition position. Verify that there is 12v on the yellow wire and ground on the black wire.

**RPA-HD1 Camera Module LED Diagnostics** 

	:	
LED Pattern	State	Action
LED solid red	Initial Power-Up	N/A
LED flickering green	Querying RadioPro for Configu- ration	N/A
LED flashing green	Normal Operation w/ HDMI Pass-thru	N/A
LED solid amber	Normal Operation w/ Camera selected	N/A
Off	No Activity	Verify 10pin harness connections and key position

PL1 Adapter Module LED Diagnostics

ı	LED Pattern	State	Action
	LED flickering green or red	Data Communication / Normal Operation	N/A
	Off	No Activity	Verify 10pin harness connections and key position

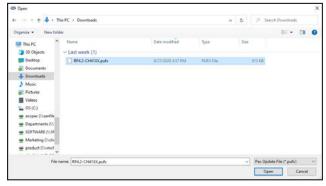
### Product Updates (Firmware)

### Firmware Updates (RadioPRO, PL1, HD1 Interface Modules)

The RadioPRO PC app will allow you to update the interface modules with new firmware as it becomes available. Please visit www.PAC-audio.com/firmware to download available updates.

To update an interface module, open the RadioPRO PC app, connect the interface to your PC via a micro USB cable, and select "Firmware" and then "Update Firmware".





Now, select "Select File". Finally, browse to the place where you saved the file, and select it. This will begin the updating process. Once finished, disconnect the interface from the PC. Repeat for every module: CH4A, PL1, HD1, and test operation.

#### Firmware Updates (Stinger Radio and PAC Application APK)

To update the Stinger radio firmware and PAC Application APK firmware, refer to the Installer Setup Manual for an in-depth walk-through on how to perform these updates on your Stinger radio unit.

### Reset / Restoring Interface Factory Settings

You can restore the RadioPRO interface module to factory default settings by pressing and holding the programming button on the side of the module until the status LED starts blinking red. Once the LED starts blinking red, release the button. You must release the button while the LED is blinking red in order to perform the reset. This reset will restore all settings to factory defaults.

### **Technical Support**

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